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ALLIANCE TO SAVE ENERGY – ARMENIA MUNICIPAL NETWORK FOR ENERGY EFFICIENCY

ACCOMPLISHMENTS

prepared by
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Yerevan 2006
Municipal Network for Energy Efficiency

Background

USAID and the Alliance to Save Energy, in cooperation with their partners in the region, launched an initiative for developing a regional network for the promotion of energy efficiency at the municipal level. The goal of the Municipal Network for Energy Efficiency is to design and implement innovative energy efficiency policies and identify barriers to their successful adoption; and to strengthen the capacity of regional and municipal stakeholders to develop, and attract financing for, energy efficiency projects in the countries of Central and Southeastern Europe, the Balkans, the Central Asian Republics, Russia, and the former Soviet Union.

The Network or MUNEE is functioning as an ongoing forum to share successful results of energy efficiency program development and implementation, and to address targeted policy areas critical to the success of energy efficiency investments in the region.

Since the year 2001, the Alliance to Save Energy through the USAID Municipal Network for Energy Efficiency (MUNEE) program in Armenia created strong understanding of flexible financing mechanisms for energy efficiency and heating projects with municipalities and housing associations, mobilized communities to initiate residential heating projects, trained municipalities and heating companies to design and seek financing for energy projects, brought together disparate energy stakeholders from all sectors to start energy policy dialogue and promote energy efficiency reform.

The activities implemented and some key accomplishments by the Alliance to Save Energy under the MUNEE program during 2001-2006 in Armenia are presented further in the present report covering:

Policy Reform

Condominium EE and Heating

Education and Awareness Campaign

Outreach to Cities/Strengthening the Municipal Energy Efficiency Network in Armenia

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Policy Reform

- ❖ One of the first steps under the MUNEE program in Armenia was the establishment of the Armenian Energy Efficiency Council (AEEC) in 2002. The Council, often referred to by local energy experts as “the Energy Club”, brought together ministry officials, non-governmental organizations, academia, energy businesses and donors, aimed at developing a dialogue on national energy policy issues and identify priority areas for energy efficiency reform.
- ❖ AEEC, co-chaired by the U.S. Agency for International Development (USAID) and the Ministry of Energy of Armenia, has served as the steering committee for the development of the Law on Energy Saving and Renewable Energy (ES&RE) of Armenia, and supported the adoption of ES&RE Law in the National Assembly (the Law was ratified in December 2004) and in general generated policy dialogue among disparate energy stakeholders on needs for reform and produced recommendations for policy intervention.

Five roundtables were held, some key outputs of which included development of the list of priority areas for policy reform, recommendations legal/legislative developments regulating the field of energy efficiency, development of the conceptual framework for country’s energy saving and renewable energy legislative needs, and further – with the ASE/MUNEE technical assistance on international experience in energy saving legislation – development of ES&RE Law, and strategic discussions on the National Program for the Promotion of Energy Saving and the development of enforcement mechanisms for ES&RE Law.

- ❖ Conducted an analysis of all donor-assisted programs on Energy Saving/Energy Efficiency, Heating and Renewable Energy Programs in Armenia. The task-based matrix is being coordinated with partners.
- ❖ After the adoption of the ES&RE Law, initiated a multi-facet initiative aimed at development of secondary legislation and ordinances required for implementation of the Law including: ordinances and technical methodological guidance on state energy examinations of buildings, power generation facilities, industrial and commercial enterprises, other end-users.
- ❖ Reviewed best practices on national Energy Efficiency (EE) Programs, and started drafting the Armenian EE Program including in-depth end-use data collection, macroeconomic and micro-economic trend analysis, identification of sectoral energy saving potentials and recommendations for utilization of those potentials with respective action plans.

Condominium EE and Heating

- ❖ Providing technical and financial support to the housing Revolving Fund in city Aparan established by “Aparan Multi-Apartment Building Management Bodies” NGO.

A Memorandum of Understanding (MOU) between Alliance to Save Energy, Aparan Municipality, National Association of Condominium Owners (NACO) and “Aparan Multi-Apartment Building Management Bodies Association” (AMABMBA) on Concerning Cooperation in the Area of Building Energy Efficiency was signed on September 12, 2005. The MOU parties help condominiums to identify and develop building energy efficiency projects that can be implemented through the established housing Revolving Fund.

- ❖ Developed and published a paper on “Decentralizing Residential Heating in Armenia: Review of Pilot Projects” aimed at collecting, reviewing and presenting the recent trends in decentralized heating of multi-apartment buildings in the Republic of Armenia, analyzing the technical solutions, their economic effectiveness, implementation barriers etc.

The report published in 2004, it presents projects implemented in Yerevan, Gumri and Aparan with the support of various donor organizations. The analysis is based on the completion reports of implementing agencies, the monitoring results - where available, as well as the survey that was conducted by the Alliance among implementing donor agencies, beneficiaries of projects and multi-apartment management bodies.

- ❖ Conducted a number of condominium surveys in a number of cities on energy efficiency status, problem areas, needs and priorities. Survey results were analyzed and a summary report on Current Energy Saving Status and Needs in Armenian Condominiums was produced. Basing on the survey findings, Alliance organized the first condominium training on residential energy efficiency issues. Condominium managers and municipal officials from the surveyed cities participated. The workshop addressed the state-of-art EE technologies and methods, financing sources and services, ESCO’s and municipalities. EE advice booklets, published by ASE were distributed to condominium managers with additional copies provided for building residents.
- ❖ In cooperation with the World Bank and the Japanese Social Development Foundation. Alliance conducted a condominium survey in a four cities (Yerevan, Charentsavan, Hrazdan, and Sevan) on heating status, willingness to participate in community-based heating rehabilitation projects, implications for low-income households, problem areas, needs and priorities. Survey results were analyzed and the summary report produced at a regular condominium/municipality workshop held in Tsaghkadzor in December 2003. The key outcome of this effort was the mobilization of 10 condominiums for embarking in IDA loan-financed community operated heating projects.
- ❖ In cooperation with National Association of Condominium Owners a report was produced on Barriers to Residential and Municipal Energy Efficiency in Armenia covering the barriers for financing EE and describing the status of several Armenian cities in terms of municipal energy efficiency status.
- ❖ Alliance supported the “Yerevanyan 155” condominium in Gumri, in the Earthquake zone, for installation of gas meters in cooperation with the Advanced Engineering Associates International, under the USAID pilot project for installation of individual gas heaters.
- ❖ Within the framework of the donors’ working group, USAID mission asked the Alliance to implement Alliance’s MUNEE condominium-targeted work in coordination with the World Bank Urban Heating Project Implementation Unit and to support the establishment of condominium advisory centers. This effort has also taken a form of Heating Equipment and Service Providers’ Market Assessment published in September 2003 and Residential Heating Pilot Project Review, which would provide and overview lessons learnt over the past decade in the field of decentralized heating pilot

projects in Armenia.

- ❖ Developed a paper on Review of 22 Energy Efficiency Laws: Guide for Policy-Makers.
- ❖ Developed Fact sheets on Condominium Status and Techno-Economic Features of Residential Heating Practices in Armenia per request of USAID- Armenia, posted on the mune.org.

Education and Awareness Campaign

- ❖ Alliance Armenian office together with Alliance Serbia team organized two Building Energy Efficiency Program (BEEP) software trainings in Armenia for professional local trainers (October 2004), 10 local municipalities (November 2004) and 20 condominiums and project developers (November 2005). The software was designed for estimation of economic, technical and energy outcomes of different energy efficiency measures applied for municipal buildings. Alliance held BEEP training for municipalities to support them in developing a bankable Energy Efficiency (EE) projects and business plans for their further implementation.
- ❖ Organizing condominium trainings, workshops and day-to-day consultations on residential energy efficiency and heating
 - technical and institutional solutions for energy efficiency,
 - financing sources and mechanisms,
 - low-income issues in heating projects,
 - roles of ESCO's and municipalities.
- ❖ In cooperation with the WB Urban Heating Project, Heating advice booklets was developed, published and distributed to over 500 condominium members in 2004.
- ❖ In cooperation with the National Association of Condominium Owners (NACO) conducted an assessment of heating equipment market, suppliers, and heating service providers. The Market assessment was published and distributed to implementing partners in the field of heating including WB, UNDP/GEF, USAID etc in 2004. The assessment includes an extensive database on types and technical features of available heating equipment and an overview of the heating services' market as well as the available domestically produced and imported heating equipment, including boilers, heat exchangers, burners, heat allocators, balancing valves, thermostatic valves, heat meters and others, in order to identify main producers and suppliers of heating equipment, specifications, and conditions of supply and price terms. The report further provides background on the organizations that produce and/or supply heating equipment, as well as provide installation, mounting and operation services. The overview of the sector provides a description of the heating service providers and the developing ESCO sector.
- ❖ Alliance developed and published an energy efficiency advice booklet for condominium residents covering energy saving tips in the kitchen, household appliances, water savings and heating optimization.
- ❖ Holding energy education workshops in high-schools; jointly developing a Renewable Energy educational poster for all schools of Armenia in Spring 2005.

Outreach to Cities: Strengthening the Municipal Energy Efficiency Network in Armenia

- ❖ Together with Lithuanian and Polish partners a Study Tour to Poland, Lithuania and Ukraine was organized for condominium and municipality representatives in November 2002. The Study Tour covered success stories in the field of EE in residential and municipal sectors.
- ❖ Numerous field trips were undertaken to different remote regions of Armenia, to create strong ties with the regional authorities and municipalities and further involvement in EE trainings. The network currently includes Yerevan and its districts, Kapan, Yeghegnadzor, Tsaghkadzor, Hrazdan, Charentsavan, Sevan, Gumri and Vanadzor.
- ❖ Alliance participated in the organization and implementation of the Second international Energy Conference in Armenia in September 2002. Two Alliance consultants participated as speakers in different sections of the Conference.
- ❖ Representatives from municipalities were selected and directed to participate in the EE financing regional workshop in Kiev – Puscha –Vodica, Ukraine in April 2002.
- ❖ Three Armenian municipalities (Kapan, Yeghegnadzor and Vanadzor) were selected and directed for participation in municipal Energy Planning Training in Moldova in June 2002. The trainees received theoretic and practical knowledge on diagnostics of facilities, business plan and project proposal development, as well as participated in expos and side events to establish partnerships.
- ❖ Representatives from Yerevan Municipality, Energy Institute, NGO working on residential EE issues (NACO) and the Alliance participated in the Second International Conference on "Complex Solution of Energy and Ecology Problems of Enterprises and Municipalities" in Big Yalta City in Ukraine in May 2005.
- ❖ Alliance made a presentation about the Building Energy Efficiency investment mechanisms at the international seminar on Sustainable Housing Management: The Perspective of Homeowners and Homeowners' Associations in Sofia in Bulgaria in November 2005.
- ❖ Alliance has initiated a dialogue with local municipalities of several towns of Armenia including Charentsavan, Tsaghkadzor, Aparan, and several communities of Yerevan on establishment of Municipal Energy Working Group to address energy efficiency financing and targeted social assistance to low-income households for heating purposes.
- ❖ Alliance, in consortiums with the UNDP/GEF National Capacity Self-Assessment Program, SolarEn Ilc, Armenia Tree Project, SolarEn Ilc and the Ministry of Education developed, published and disseminated Renewable Energy educational posters and teachers' instruction manuals for all schools of Armenia.
- ❖ The MUNEE.org website providing regular updates on achievements in Armenia, while the Alliance Armenia staff compiled and disseminated the "Armenia – Energy News Review" electronic newsletter.